

Remarks

Reconsideration of this application as amended is respectfully requested.

Claims 1-4, 7, 12, and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,008,564 of *Luce et al.* ("*Luce*").

Claims 5 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Luce* and U.S. Patent Application Publication No. US 2002/0185720 of *Khan et al.* ("*Khan*").

Claims 14, 15, 17, 18, and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Luce* and U.S. Patent Application Publication No. US 2002/0186618 of *Kirkpatrick* ("*Kirkpatrick*").

The examiner has objected to the drawings and has stated that "the insulator that encases the structure" must be shown. The "insulator that encases the structure" as claimed in claim 6 is shown and referenced with the number 22 in Figure 4 of applicant's drawings as stated in applicant's specification which provides that

**Figure 4** shows an arrangement for reducing thermal drift in the electronic component 10 using a structure that increases its thermal mass and insulates it from air flow. In this arrangement, the thermal mass of the electronic component 10 is increased using a metal case 20 and the influence of ambient temperature changes and air flow is reduced using an insulator 22 that encases the electronic component 10 and the metal case 20.

(Page 7 of applicant's specification) (emphasis original and added).

The examiner has stated that corrected drawing sheets are required in reply to the Office Action. Applicant respectfully submits that corrected drawings are not needed give that "the insulator that encases the structure" is already shown in Figure 4 of the drawings.

The examiner has rejected claims 1-4, 7, 12, and 13 under 35 U.S.C. §103(a) as being unpatentable over *Luce*.

Applicant respectfully submits that amended claim 1 is not obvious in view of *Luce* because *Luce* does not disclose or suggest a structure that surrounds an enclosure of an electronic component and that reduces a thermal drift by increasing a thermal mass of the electronic component as claimed in amended claim 1. Instead, *Luce* discloses a potting material 46 on an enclosure can 40 of a device 32 that shields the device 32 from the atmosphere (*Luce*, col. 4, lines 31-56). It is submitted that the potting material 46 of *Luce* does not reduce thermal drift by increasing a thermal mass of a electronic component as claimed in claim 1. *Luce* does not teach or suggest that the potting material 46 reduces thermal drift by increasing the thermal mass of the device 32. Instead, *Luce* teaches that the potting material 46 seals the device 32 from the atmosphere (*Luce*, col. 4, lines 31-32) and facilitates the attachment of a wrist band (*Luce*, col. 4, lines 57-60).

The examiner has stated that it would have been obvious for the structure disclosed by *Luce* to increase thermal mass because heat dissipation is an inherent characteristic of metals. (Page 3, Office Action, 2-11-05). It is respectfully submitted that the potting material 46, i.e. the structure that surrounds the enclosure of the device 32, of *Luce* is not a metal.

The examiner has also stated that the potting material of *Luce* conducts heat to some degree and increases mass and therefore increases thermal mass. (Page 5, Office Action, 2-11-05). It is submitted that even assuming the examiner is correct in stating that potting material increases thermal mass, the potting material 46 of *Luce* does not affect the thermal properties of the device 32 of *Luce* because the potting material 46 is thermally isolated from the device 32. The potting material 46 of *Luce* is disposed on top of the can

40 and the can 40 is thermally isolated from a substrate 10 that holds the device 32 by an insulator 42. (*Luce*, Fig. 2 and col. 4, lines 36-41). In addition, the can 40 is separated from a support plate 30 of the device 32 by a spring mechanism 44 (*Luce*, Fig. 2 and col. 4, lines 45-48).

Given that claims 3-4, 12, and 13 depend from amended claim 1, it is submitted that claims 3-4, 12, and 13 are not obvious in view of *Luce*.

It is also submitted that claim 6 is not obvious in view of *Luce* and *Khan*. Claim 6 depends from amended claim 1 and *Luce* and *Khan* do not disclose or suggest a structure that surrounds an enclosure of an electronic component and that increases a thermal mass of the electronic component as claimed in amended claim 1. Applicant has shown that *Luce* does not disclose or suggest a structure that surrounds an enclosure of an electronic component and that increases a thermal mass of the electronic component as claimed in claim 1. *Khan* discloses an epoxy 116 that surrounds and integrated circuit die 102 for mechanical and environmental protection (*Khan*, Figure 1A and paragraph 0062) rather than a structure that surrounds an enclosure of an electronic component and that increases a thermal mass of the electronic component as claimed in amended claim 1.

It is submitted that claim 14 is not obvious in view of *Luce* and *Krikpatrick*. Claim 14 depends from amended claim 1 and *Luce* and *Krikpatrick* do not disclose or suggest a structure that surrounds an enclosure of an electronic component and that increases a thermal mass of the electronic component as claimed in amended claim 1. Applicant has shown that *Luce* does not disclose or suggest a structure that surrounds an enclosure of an electronic component and that increases a thermal mass of the electronic component as claimed in claim 1.

*Kirkpatrick* discloses an alarm clock (See Abstract of *Kirkpatrick*) rather than a structure that surrounds an enclosure of an electronic component and that increases a thermal mass of the electronic component as claimed in amended claim 1.

It is further submitted that amended claim 15 is not obvious in view of *Luce* and *Krikpatrick*. Amended claim 15 includes limitations similar to the limitations of amended claim 1. Therefore, the remarks stated above with respect to claim 14 and *Luce* and *Krikpatrick* also apply to amended claim 15.

Given that claims 17, 18, and 20 depend from amended claim 15, it is submitted that claims 17, 18, and 20 are not obvious in view of *Luce* and *Krikpatrick*.

It is respectfully submitted that in view of the amendments and arguments set forth above, the applicable objections and rejections have been overcome.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 50-1078 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

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